

REMARKS

I. Introduction

In response to the Office Action dated August 25, 2009, which was made final, and in conjunction with the Request for Continued Examination (RCE) submitted herewith, claims 1 and 43 have been amended. Claims 1-16 and 43-58 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. Prior Art Rejections

In section (3) of the Office Action, claims 1-7, 9, 12, 43-49, 51, and 54 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangal et al., U.S. Patent No. 6,865,398 (Mangal) in view of Edwards, U.S. Publication No. 20040228292 (Edwards). In section (4) of the Office Action, claims 8, 16, 50, and 58 are rejected under 35 U.S.C. §103 as being unpatentable over Mangal in view of Edwards. In section (5) of the Office Action, claims 10 and 52 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangal in view of Edwards as applied to claims 1 and 43, and further in view of Sarkar et al., U.S. Patent No. 7,236,580 (Sarkar). In section (6) of the Office Action, claims 11 and 53 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangal in view of Edwards as applied to claims 1 and 43, and further in view of Ahmed et al., U.S. Patent No. 7,085,364 (Ahmed). In section (7) of the Office Action, claims 13, 15, 55, and 57 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangal in view of Edwards as applied to claims 1 and 43, and further in view of Wilson, U.S. Patent No. 6,192,119 (Wilson). In section (8) of the Office Action, claims 14 and 56 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangal in view of Edwards, as applied to claims 1 and 43, and further in view of Botterell et al., U.S. Patent No. 3,912,874 (Botterell).

Applicants' attorney respectfully traverses these rejections in light of the amended claims above and the arguments below. Specifically, Applicants' attorney submits that the Mangal, Edwards, Sarkar, Ahmed, Wilson and Botterell references, taken individually or in any combination, do not teach or suggest all of the limitations of Applicants' claims.

For example, Applicants' independent claims 1 and 43 operate in a different manner from the combination of Mangal and Edwards.

In Applicants' claimed invention, both the real-time exchange and the handsets participating in the Push-to-Talk (i.e., P2T or PTT) or Push-to-Conference (i.e., P2C or PTC)

sessions communicate with each other by means of the call setup and in-band signaling within the cellular network used by “normal” calls. In contrast, Mangal provides a Push-to-Talk function between data capable mobile stations by means of a “packet data” service option within the cellular network, but does not provide the Push-to-Talk function by means of the call setup and in-band signaling used with normal calls. Edwards also provides a Push-to-Talk function, but relies on the well-known Integrated Digital Enhanced Network (iDEN) system manufactured by Motorola, Inc., which operates in parallel with, but separately from, an associated cellular network.

In Applicants’ claimed invention, the real-time exchange interfaces to a mobile switching center (MSC) in the cellular network to provide group voice services. In Mangal, the Push-to-Talk server does not interface to a mobile switching center, but instead resides within an Internet Protocol (IP) network. In Edwards, there is nothing equivalent to the real-time exchange in either the iDEN system or the associated cellular network.

In Applicants’ claimed invention, the mobile switching center routes an originating leg of the group voice services from an originating handset to the real-time exchange, and the real-time exchange initiates one or more terminating legs of the group voice services to one or more terminating handset through at least one mobile switching center. This differs from Mangal where the terminating handsets themselves originate the terminating legs:

Mangal: Col. 13, lines 8-18

At block 118, PTT server 44 may send a session initiation message, such as a SIP INVITE to terminating MS 14. When that SIP invite reaches BSC 36, BSC 36 will note that MS 14 is dormant, so BSC 36 will page MS 14 on an air interface paging channel. At block 120, **MS 14 will then acquire a traffic channel, such as by sending a request message to BSC 36 over an air interface access channel** and then receiving a channel assignment from BSC 36. At block 122, MS 14 would then receive the INVITE and would work with PTT server 44 to establish a terminating RTP leg between PTT server 44 and MS 14.

As noted above, there is nothing equivalent to the real-time exchange in Edwards, and thus no similar function is performed.

In Applicants’ claimed invention, the real-time exchange switches the voice frames for the group voice services from the originating handset to the terminating handset across the bearer paths and through at least one mobile switching center that switches the voice frames for both the normal calls and the group voice services in the cellular telephone network.

Mangal implements its Push-to-Talk function using data packets and packet switching, not the switching of voice frames across bearer paths (i.e., circuit switching). On the other hand, Mangal does refer to circuit-switching:

Mangal: Col. 13, line 63 – col. 14, line 3

Still further, the network connection could be circuit-switched instead of, or in addition to, packet-switched. For instance, MSC 28 and MSC 38 could be linked by a circuit-switched telephone network to a conference bridge. The conference bridge could then provide a function akin to that provided by the PTT server described above. In that case, industry standard ISUP signaling or some other signaling might be used to set up the communication legs.

However, this reference is not enabling with regard to Applicants' claimed invention, because there is no discussion in Mangal of a mobile switching center routing an originating leg of the group voice services from an originating handset to a real-time exchange, the real-time exchange initiating one or more terminating legs of the group voice services to one or more terminating handset through the mobile switching center, and the real-time exchange switching voice frames for the group voice services from the originating handset to the terminating handset across the bearer paths and through the mobile switching center.

As noted above, there is nothing equivalent to the real-time exchange in Edwards, and thus no similar function is performed.

Thus, the combination of Mangal and Edwards does not teach or suggest the limitations of Applicants' claims directed to a real-time exchange that interfaces to a mobile switching center in the cellular network to provide both the half-duplex Push-to-Talk and full-duplex Push-to-Conference capabilities. In addition, the combination of Mangal and Edwards does not teach or suggest that both the real-time exchange and the handsets participating in the half-duplex Push-to-Talk and full-duplex Push-to-Conference sessions communicate with each other by means of the same call setup and in-band signaling as used for normal calls within the cellular network.

Moreover, Applicants' attorney submits that Mangal cannot be combined with Edwards in the manner suggested by the Office Action. As noted above, Mangal performs its Push-to-Talk function wholly within the cellular network, while Edwards performs its Push-to-Talk function wholly using a dispatch system (i.e., iDEN system) outside the cellular network. Consequently, the combination of Mangal and Edwards would result in the same function being

implemented in completely different and unrelated ways both within the cellular network and in a parallel but separate dispatch network.

In Applicants' claimed invention, however, normal calls, half-duplex Push-to-Talk sessions, and full-duplex Push-to-Conference sessions are all similarly implemented in Applicants' cellular network. This is what distinguishes Applicants' claims over the combination of Mangal and Edwards.

The remaining references, Sarkar, Ahmed, Wilson and Botterell, fail to overcome the deficiencies of Mangal and Edwards in these aspects. Recall that these references were only cited against Applicants' dependent claims, and were only cited for teaching: that a passive participant may mute his/her audio output and listen to a conference call (Sarkar), that an initiator of a conference call can drop or add participants during the call (Ahmed), that the initiator of the conference call should be billed for the call (Wilson), and that when a conference originator decides to end a conference, all the conferee ports are released (Botterell).

In view of the above, Applicants' attorney submits that the Mangal, Edwards, Sarkar, Ahmed, Wilson and Botterell references, taken individually or in any combination, do not teach or suggest all of the limitations of Applicants' claims. Moreover, the various elements of Applicants' claimed invention together provide operational advantages over the references. In addition, Applicants' invention solves problems not recognized by the references.

Thus, Applicants' attorney submits that independent claims 1 and 43 are allowable over the Mangal, Edwards, Sarkar, Ahmed, Wilson and Botterell references. Further, dependent claims 2-16 and 44-58 are submitted to be allowable over the references in the same manner, because they are dependent on independent claims 1 and 43, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 2-16 and 44-58 recite additional novel elements not shown by the references.

III. Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that can be resolved in an interview, the Examiner is urged to call Applicants' undersigned attorney.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers, if appropriate. Please charge all fees to Deposit Account No. 50-0494 of Gates & Cooper LLP.

Respectfully submitted,

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